DIRECT TESTIMONY OF JIM GREVATT
ON BEHALF OF THE SOUTH CAROLINA COASTAL CONSERVATION LEAGUE AND SOUTHERN ALLIANCE FOR CLEAN ENERGY

Q: PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.

A: My name is Jim Grevatt. I am a Managing Consultant at Energy Futures Group, located at 10298 Route 116, Hinesburg, VT 05461.

Q: PLEASE SUMMARIZE YOUR PROFESSIONAL AND EDUCATIONAL QUALIFICATIONS.

A: I have worked in the energy efficiency industry since 1991 in a wide variety of roles. Prior to joining EFG in 2013, I served as the Director of Residential Energy Services at Efficiency Vermont and the District of Columbia Sustainable Energy Utility. I also helped develop and launch the natural gas energy efficiency programs at Vermont Gas Systems, managed their residential efficiency programs for eight years, and then the total portfolio, including commercial programs for four years. During my time at Vermont Gas numerous gas energy efficiency programs under my direction were recognized by the American Council for an Energy Efficient Economy ("ACEEE") as "exemplary."[1] I have extensive hands-on experience conducting hundreds of energy audits for Vermont's Low-Income Weatherization Assistance Program and Vermont Gas Systems' DSM programs. In my current role as Managing Consultant at EFG, I have advised regulators, utilities, and other energy efficiency program administrators, environmental organizations, and low

[1] See https://www.aceee.org/research-report/u035.

income and affordable housing advocates in numerous states, including California, Colorado, Delaware, Florida, Illinois, Indiana, Iowa, Kentucky, Maine, Maryland, Mississippi, Missouri, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, Pennsylvania, Vermont, Virginia, and West Virginia, as well as the Canadian provinces of British Columbia and Manitoba. I focus on using my in-depth knowledge of energy efficiency program management and operations as well as experience in strategic planning to ensure that programs achieve their desired market impacts. I received a B.F.A. from the University of Illinois. My curriculum vitae is attached as Exhibit JG-1 to my testimony.

Q: HAVE YOU PREVIOUSLY FILED TESTIMONY BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA?

A: Yes, I provided expert witness testimony in Docket Nos. 2019-224-E and 2019-225-E. I have also provided expert witness testimony in energy efficiency proceedings in fourteen of the jurisdictions I mention above, including Colorado, Florida, Illinois, Indiana, Iowa, Kentucky, Nevada, North Carolina, Pennsylvania, Vermont, Virginia, and West Virginia, as well as the Canadian provinces of British Columbia and Manitoba.

Q: ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A: The South Carolina Coastal Conservation League and Southern Alliance for Clean Energy (collectively, "Environmental Intervenors").

Q: ARE YOU SPONSORING ANY EXHIBITS?

A: Yes, I am sponsoring Exhibits JG-1 through JG-8.

Q: WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A: The purpose of my testimony is to provide recommendations to the Commission related to Dominion Energy South Carolina, Inc.'s ("DESC") Request for Approval of New Natural Gas Energy Efficiency Programs.

Q: PLEASE SUMMARIZE THE KEY FINDINGS OF YOUR REVIEW.

A: Based on my review of the Company's filing and its supporting testimony, I offer the following observations:

1. The Company proposes to offer a modest portfolio of natural gas efficiency programs that will provide opportunities for its residential and commercial customers to receive rebates and information to help them manage the amount of natural gas used in their homes and businesses, thus allowing customers to reduce their bills. These proposed programs include the following:
    a. A revised "EnergyWise Store" that includes rebates for certain natural gas related products;
    b. Residential High Efficiency Gas Equipment Rebates;
    c. Commercial High Efficiency Gas Equipment Rebates;
    d. Expanded Neighborhood Energy Efficiency Program to include natural gas efficiency measures;
2. The Company proposes to amortize the program costs at its weighted average cost of debt, which is 5.62% as of December 31, 2021, and recover them over a three-year period;

3. The Company proposes to recover net lost revenues ("NLR") resulting from reduced therm sales in its Natural Gas RSA under S.C. Code Ann. § 58-5-400, *et seq.,* rather than as a component of the Gas DSM rider;
4. The Company has not conducted market studies or baseline assessments to determine the current market share of the equipment it proposes to provide rebates for;
5. The Company has not estimated the "net" savings the programs would achieve and seems to base its cost-effectiveness analysis on gross savings, which are the savings that occur for participants regardless of whether or not the program influences them. This raises questions about the reliability of the benefit-cost analysis;
6. If the gas programs are approved, DESC will expand the energy efficiency Advisory Group to include natural gas.

Q: WHAT ARE YOUR RECOMMENDATIONS TO THE COMMISSION?

A: Based on my review I recommend the Commission take the following actions with respect to the Company's application:

1. Approve DESC's proposal for the EnergyWise store;
2. Approve the NEEP proposal as filed, but:
    a. Direct the Company to conduct further analysis of opportunities to cost-effectively implement comprehensive measures in NEEP on a dual-fuel gas and electric basis;
    b. Direct the Company to file the results of this analysis with the Commission in 180 days;

3. Reject the Residential High Efficiency Gas Equipment Rebates and Commercial High Efficiency Gas Equipment Rebates programs without prejudice, and direct the Company to include the following as part of any future re-filed program proposal:
    a. The findings of market research to determine a baseline for current market share of any proposed high efficiency gas equipment;
    b. Estimated net-to-gross ratios for any proposed high efficiency gas equipment and updated cost-effectiveness results based on net savings;
    a. For any proposed high efficiency gas equipment for which there are high efficiency electric alternatives available in the market, provide the results of a life-cycle cost and carbon emissions analysis comparing the proposed gas equipment to high efficiency electric alternatives. For example, any application proposing rebates for high efficiency gas furnaces should include a life cycle cost analysis comparing the costs of a gas furnace-electric central air conditioner system to a high efficiency electric heat pump;
4. Approve the Company's recommendation to address NLR in its RSA proceedings and establish clear parameters for how NLR should be addressed in advance of the Company's next RSA filing to ensure transparency and address any over-collection risk that could inadvertently result from NLR recovery.

DESC PROPOSAL FOR GAS EFFICIENCY PROGRAMS

Q: WHAT ARE THE NATURAL GAS EFFICIENCY PROGRAMS THE COMPANY HAS PROPOSED?

A: In its filing the Company has proposed to introduce four programs, two of which – the EnergyWise Store and Neighborhood Energy Efficiency Program – are expansions of programs that are currently offered in its electric energy efficiency ("EE") portfolio. The Company also proposes two new offerings that would provide incentives for customers to purchase high efficiency natural gas equipment such as water heaters and furnaces.

ENERGYWISE STORE PROGRAM

Q: HOW DOES THE COMPANY PROPOSE TO EXPAND THE ENERGYWISE STORE FOR NATURAL GAS CUSTOMERS?

A: The Company proposes to "revise eligibility in the EnergyWise Savings Store to include product offerings allowing online discounts for residential natural gas customers [using] the EnergyWise Store's existing infrastructure and implementation contractor to cost-effectively expand customer access."[2] This approach makes sense as a way to minimize the administrative costs of offering the proposed gas-saving measures, which include smart thermostats, low-flow showerheads, faucet aerators, and weather stripping. I consider it to be a best-practice when dual-fuel utilities combine gas and electric programs to streamline communications and participation for customers while also minimizing administrative costs, and therefore I recommend the Commission approve DESC's proposal for the EnergyWise store.

NEIGHBORHOOD ENERGY EFFICIENCY PROGRAM

[2] Direct Testimony of Sheryl K. Shelton, p. 10 of 19, lines 10-11, 16-17.

Q: DOES THE COMPANY PROPOSE TO OFFER OTHER COMBINED GAS AND ELECTRIC PROGRAMS IN THIS APPLICATION?

A: Yes, the Company also proposes to expand its current electric-only Neighborhood Energy Efficiency Program ("NEEP") to gas customers, proposing to "leverage existing NEEP infrastructure to minimize administrative costs for the expansion of this program by simultaneously providing the proposed gas offerings and the electric NEEP offerings using the same implementation contractor." [3]

Q: WILL THE COMPANY USE THIS CONSOLIDATED APPROACH TO EXPAND THE MEASURES THAT ARE INSTALLED FOR INCOME-QUALIFIED CUSTOMERS?

A: From the relatively limited detail that is provided it appears that the Company's near-term focus with the proposed expansion is more on expanding access to the in-home energy assessment, energy efficiency education, and low-cost measures than on increasing the availability of more comprehensive energy saving projects.

Q: DO YOU SUPPORT THE COMPANY'S PROPOSED EXPANSION OF NEEP?

A: I strongly support expansion of NEEP to gas customers however I am disappointed that the specific measures the Company plans to offer appear to be so limited. It would be better for customers for the Company to further capitalize on the development of a gas efficiency programs by investigating the opportunity to offer measures that save both gas and electricity, such as insulation and air sealing. An approach that evaluates measures that save both gas and electricity will account for

[3] Direct Testimony of Sheryl K. Shelton, p. 12 of 19, lines 18-21.

the cost efficiencies of a dual-fuel program and reflect the benefits of saving both fuels.

Q: DID THE COMPANY ANALYZE OPPORTUNITIES TO PROVIDE MORE COMPREHENSIVE, DUAL-FUEL SAVING MEASURES IN NEEP?

A: It did not. In response to discovery the Company indicated that it "has not completed any analyses on the potential benefits and/or cost-effectiveness of a co-funded electric and gas program."[4] Rather, it "focused on the expansion of the current NEEP program to natural gas customers."[5] As noted earlier, I fully support the Company in expanding NEEP to gas customers, but it has missed an opportunity here by not considering whether sharing the costs for measures that save both gas and electricity could improve the cost-effectiveness of the program while also providing greater savings to participants – especially those households that face significant energy burdens.

Q: HAS THE COMPANY MISSED OTHER OPPORTUNITIES TO IMPROVE ADMINISTRATIVE EFFICIENCY BY SHARING PROGRAM COSTS ACROSS GAS AND ELECTRICITY?

A: I believe it has. In fact, while its position that it "must ensure that the current HEC offering under the Electric DSM portfolio is able to achieve cost[~~s~~] effectiveness"[6] before "add[ing] a gas-specific HEC program"[7] may sound reasonable at face value, it actually stands reasonable program administration on its head: the fact that the "HEC Program was experiencing a decline in cost effectiveness and energy

[4] DESC Response to CCL/SACE Data Request No. 1-7, attached as Exhibit JG-2.
[5] *Id.*
[6] Direct Testimony of Sheryl K. Shelton, p. 14 of 19, lines 21-22.
[7] Direct Testimony of Sheryl K. Shelton, p. 14 of 19, line 18.

savings"[8] is actually a strong reason to investigate whether a joint gas-electric program would be more cost effective for both gas and electric customers. Neither gas nor electric customers should be required to pay for redundant administration of similar programs. If the electric program can be run more cost effectively by including gas measures, it is in the electric customers best interest for DESC to implement that option.

Q: DOES THE COMPANY RECOGNIZE THE VALUE OF SHARING COSTS ACROSS BOTH GAS AND ELECTRIC EE PROGRAMS?

A: DESC does appear to recognize this, given that in conducting benefit cost analyses "[f]or measures that have the potential to produce both electric and gas benefits for participating customers, the incremental measure costs were pro-rated by the value of the customer's associated electric energy cost savings relative to the customer's natural gas cost savings."[9] In other words, the Company acknowledges that it is not reasonable to assign the full costs of a measure to either gas or electricity when it saves both, yet it failed to consider how this understanding could improve program cost effectiveness and expand benefits to its customers.

Q: CAN YOU PROVIDE AN ILLUSTRATION OF WHY DESC SHOULD HAVE MORE FULLY ANALYZED MEASURES AND PROGRAMS THAT SAVE BOTH GAS AND ELECTRICITY?

A: Let me provide a much-simplified illustration that may be helpful in answering this question. Let us assume that an energy efficiency measure – say attic insulation – will cost $1000 and will save $40 per year in reduced electric air conditioning costs

[8] Direct Testimony of Sheryl K. Shelton, p. 14 of 19, line 23 through p. 15 of 19, line 1.
[9] DESC Response to ORS Data Request No. 1-5, attached as Exhibit JG-3.

for the next 20 years. The total benefit over the 20 year life is $800,[10] which is less in electricity savings than the measure cost to install – so it is not cost-effective based solely on the electric savings, and on this basis, it would be inappropriate for the Company to support the measure with incentives.

Q: HOW WOULD THIS ANALYSIS CHANGE IF GAS SAVINGS WERE ALSO CONSIDERED?

A: Let us say that the very same attic insulation will also save gas by reducing heating costs in the winter, and that the gas savings will amount to $30 per year for the next 20 years, or $600 total. As when we looked only at the electricity savings, this measure would not be cost-effective just based on the gas savings. However, when we look at the total $800 electricity + $600 gas savings, the total $1400 savings exceeds the cost, and the measure is cost-effective in total. It will not require any additional effort or cost to install the insulation in a manner that will save both gas and electricity. Reflecting the value of both in benefit cost testing in this illustration clearly suggests that this dual-fuel approach could allow customers and the Company to save more of both fuels cost-effectively. Therefore, it only makes sense for the Company to fully analyze such opportunities for its dual-fuel customers.

Q: IF THE INSULATION MEASURE IN YOUR ILLUSTRATION IS NOT COST-EFFECTIVE FOR THE COMPANY'S GAS-ONLY CUSTOMERS SHOULD THEY NOT BE ALLOWED TO PARTICIPATE IN THE PROGRAM?

[10] For simplicity in illustrating this point I am not using the NPV of the savings and costs.

A: In my view this is certainly an important policy question, but I think it would be more relevant to discuss with benefit-cost results in hand, rather than as a hypothetical. There are a number of different ways the Commission could direct the Company to address programs and cost-effectiveness for customers who only use DESC for gas or electricity rather than both, and I advise against simply not conducting the analysis because the preferred policy solution has not yet been identified.

Q: WHAT ARE SOME OF THE POLICY OPTIONS THAT YOU THINK MIGHT BE APPROPRIATE FOR ADDRESSING THIS ISSUE?

A: Among others, the Commission might direct DESC to seek partnership agreements with the other utilities with which it shares customers, or to offer a tiered incentive structure based on whether a customer is a dual or single fuel DESC customer. I am sure there are other approaches that could be considered. My recommendation therefore is that the Commission direct DESC to conduct a full analysis of the opportunities to provide robust, comprehensive home retrofit offerings in the context of NEEP and other programs, with a special emphasis on programs and long-lived measures that save significant amounts of gas and electricity for households.

Q: WHAT IS YOUR RECOMMENDATION TO THE COMMISSION REGARDING APPROVAL OF THE COMPANY'S PROPOSAL TO EXPAND THE NEEP PROGRAM TO INCLUDE LOW-COST GAS EE MEASURES?

A: I recommend the Commission:

1. Approve the NEEP proposal as filed;
2. Direct the Company to conduct further analysis of opportunities to cost-effectively implement comprehensive measures in NEEP on a dual-fuel gas and electric basis;
3. Direct the Company to file the results of this analysis with the Commission in 180 days, along with any proposed expansion of dual-fuel measures and programs.

HIGH EFFICIENCY GAS EQUIPMENT REBATES

Q: WHAT ARE THE TWO NEW PROGRAMS FOR GAS CUSTOMERS THAT DESC IS PROPOSING?

A: DESC is proposing a rebate program for high efficiency natural gas equipment for residential customers, and a similar program for commercial customers. Each program would include rebates for furnaces and water heaters, as well as smart thermostats. The proposed commercial program would also include several types of commercial cooking equipment.

Q: ARE REBATE PROGRAMS FOR HIGH EFFICIENCY GAS EQUIPMENT COMMON IN THE INDUSTRY?

A: Rebate programs such as those proposed by DESC have been common among gas utilities that provide efficiency programs for many years. When I started working at Vermont Gas in 1993 its furnace rebate program was just getting off the ground. At that time, high efficiency equipment was uncommon even in areas with cold climates such as Vermont. However, after a number of years of offering that program, and as the market for high efficiency equipment grew, it became quite normal for customers to install high efficiency equipment and unusual to install a conventional furnace.

Q: IS THERE REASON TO THINK THAT A MAJORITY OF DESC'S CUSTOMERS ARE LIKELY TO INSTALL HIGH EFFICIENCY EQUIPMENT?

A: Unfortunately, the data that would definitively answer that question are difficult to come by in the public domain. Manufacturers and distributors are protective of competitively sensitive sales data that would quantify the market penetration of equipment they sell at different efficiency levels. However, there are some national indicators that suggest that at least some fraction of the gas furnace sales that take place in South Carolina may be high efficiency even in the absence of utility rebate programs. Specifically, The Consortium for Energy Efficiency, which facilitates collaboration among utilities that offer EE programs by working to develop common efficiency program standards, reports that of the 8,734 different furnace models that were available nationally in 2019, over 70% had an Annual Fuel Utilization Efficiency ("AFUE") of at least 90%.[11] While such national figures do not necessarily answer questions about market penetrations in specific states they do indicate that there are enough high efficiency furnaces in the market that understanding the market share of high efficiency equipment in the Company's service territory is a critical point of reference for designing programs such as those proposed in DESC's application.

Q: DID DESC INDICATE WHETHER IT HAD CONDUCTED ANY MARKET RESEARCH TO DETERMINE THE PENETRATION OF HIGH EFFICIENCY EQUIPMENT IN ITS TERRITORY?

---

[11] Consortium for Energy Efficiency Residential Heating and Cooling Systems Initiative, January 15, 2021, Table 2, p.10. https://cee1.org/content/cee-program-resources.

A: In response to discovery on this very question DESC replied "No. DESC did not conduct research into the existing market share for high efficiency gas equipment."[12] This is concerning, because understanding the existing market share for high efficiency equipment is key to determining the cost-effectiveness of the proposed initiative.

Under normal industry practice, customers who would purchase high efficiency equipment even in the absence of an efficiency program are considered "free riders." Cost-effectiveness testing is intended to measure the program costs against only the benefits the program causes to occur. Thus, savings from free riders do not count in the calculations. In industry parlance, "gross" savings are the savings that occur for participants regardless of whether or not the program caused them to purchase the high efficiency equipment, and "net" savings are the savings the program causes to occur, with savings from free riders removed.

Q: DID DESC CONDUCT BENEFIT COST TESTING USING NET SAVINGS?

A: While I cannot answer that question definitively, based on discovery responses it appears that it used gross savings to estimate cost effectiveness for the proposed programs. In response to discovery asking for information on net savings values, the Company says that "[m]easure impacts were only calculated on a gross basis" and " [n]o net-to-gross values were assumed."[13] However, the Company also states that "Resource Innovations followed standard industry calculations, as documented in the California Standard Practice Manual, to analyze the proposed programs from

---

[12] DESC Response to CCL/SACE Data Request No. 1-5, attached as Exhibit JG-4.
[13] DESC Response to CCL/SACE Data Request No. 1-9, attached as Exhibit JG-5.

four standard cost-benefit test perspectives (TRC, PCT, UCT, and RIM)."[14] I am not sure how the Company could have used net savings to calculate cost-effectiveness, which would be standard industry practice, without having first determined an estimate for net savings.

Q: SHOULD THE COMMISSION BE CONCERNED IF THE COMPANY DID NOT ESTIMATE NET SAVINGS FOR CONDUCTING COST-EFFECTIVENESS TESTING?

A: Again, while the Company may have in fact done something different than what is implied in its discovery responses, yes, I believe this should concern the Commission. The Company indicates that both the residential and commercial equipment replacement programs have TRC test results of only 1.1. If the Company did, in fact use gross savings in conducting these calculations, and if net savings are less than gross savings, which I believe is likely, then these programs might fail the TRC test, as there is little cushion for the programs to remain cost-effective if the savings are less than assumed in the calculations.

Q: DO YOU HAVE OTHER CONCERNS ABOUT THE TWO EQUIPMENT REBATE PROGRAMS?

A: Yes, I have two additional concerns. The first is that there appears to be a discrepancy in the savings estimates in the Company's workbooks. Specifically, as a basis for estimating savings from smart thermostats, the Company seems to use an estimated total annual gas usage of 525 therms for an 80% AFUE with a manual thermostat and 467 annual therms for a 90% AFUE furnace, or a difference of 58

[14] DESC Response to ORS Data Request No. 1-5, attached as Exhibit JG-3; DESC Response to ORS Data Request No. 1-4, attached as Exhibit JG-6.

therms between the 80% and 90% furnaces.[15] Yet the Company estimates a customer will save 81 therms annually for installing a 90% AFUE furnace,[16] nearly 40% more than what it used as the basis for smart thermostat savings. I am not clear why this is the case.

Q: WHAT IS THE SECOND OF YOUR ADDITIONAL CONCERNS?

A: Fundamentally, I am concerned that the Company may be inadvertently proposing to promote equipment such as high efficiency gas furnaces that may not be in the best interest of its customers. While I believe that high efficiency equipment is in customers' interests generally, the Company "has not conducted any analyses comparing the installation and operating costs of gas equipment measures to the installation and operating costs of electric equipment."[17] High efficiency electric heat pumps quite conceivably have lower lifetime installation and operating costs than the combination of a gas high efficiency furnace and an electric central air conditioner. Heat pumps will almost certainly also have lower carbon emissions. DESC has not conducted this analysis, yet the availability of rebates for high efficiency gas furnaces could potentially make the gas option more attractive than heat pumps regardless of the life cycle costs to customers.

Q: WHY SHOULD THE COMMISSION CONSIDER WHETHER ELECTRIC HEAT PUMPS INSTEAD OF GAS FURNACES ARE IN CUSTOMERS' INTEREST IF THIS PROCEEDING IS ONLY ADDRESSING GAS EFFICIENCY PROGRAMS?

---

[15] DESC Response to ORS Data Request No. 1-4 ("Gas Savings" tab, row 30), attached as Exhibit JG-6.
[16] DESC Response to ORS Data Request No. 1-4 ("Program & Measure Details," row 4), attached as Exhibit JG-6.
[17] DESC Response to CCL/SACE Data Request No. 1-6, attached as Exhibit JG-7.

A: If customers would be better served, and save more money, by installing a heat pump instead of a gas furnace, then the Company should not be providing rebates that steer them towards a gas furnace. However, DESC has not conducted an analysis that looks at the potential, additional benefits of electrification over gas efficiency.

Q: WOULD DENYING THE COMPANY'S REQUEST FOR CERTAIN GAS EQUIPMENT REBATES BE AKIN TO THE COMMISSION INDICATING A PREFERENCE FOR ELECTRICITY?

A: No. It would not indicate a preference for one fuel over another, rather it would appropriately hold DESC to a standard that it must consider and transparently communicate to its customers about the relative benefits of different fuel choices. Customers would still be free to choose whatever fuel they prefer, but DESC would not be permitted to provide efficiency incentives that could entice customers to make choices that could cost them more in the long run. Indeed, while electric efficiency is not on the table in this proceeding, I believe it would benefit customers for the Commission to consider energy efficiency comprehensively. This is consistent with my earlier recommendations for the Company to conduct analyses of the comprehensive benefits of certain efficiency measures, such as insulation, including the benefits of both gas and electricity savings.

Q: HOW DO YOU RECOMMEND THE COMMISSION RESPOND TO THE COMPANY'S REQUEST FOR APPROVAL OF THE TWO EQUIPMENT REBATE PROGRAMS?

A: I recommend the Commission reject the programs without prejudice, and direct the Company to include the following as part of any future re-filed program proposal:

1. The findings of market research to determine a baseline for current market share of any proposed high efficiency gas equipment;
2. Estimated net-to-gross ratios for any proposed high efficiency gas equipment and updated cost-effectiveness results based on net savings;
3. For any proposed high efficiency gas equipment for which there are high efficiency electric alternatives available in the market, provide the results of a life-cycle cost and carbon emissions analysis comparing the proposed gas equipment to high efficiency electric alternatives. For example, any application proposing rebates for high efficiency gas furnaces should include a life cycle cost analysis comparing the costs of a gas furnace-electric central air conditioner system to a high efficiency electric heat pump.

NET LOST REVENUES

Q: WHAT IS YOUR UNDERSTANDING OF THE COMPANY'S PROPOSAL REGARDING RECOVERY OF NET LOST REVENUES?

A: The Company proposes to recover net lost revenues ("NLR") that occur as a result of the proposed gas efficiency programs through its annual RSA proceeding rather than through the gas efficiency rider. My understanding is that the RSA proceeding is used to re-set the Company's revenue requirement for the coming year based on its approved costs. I support the concept of addressing NLR through the RSA proceeding depending on the details of how this would be done, which I do not believe are clear in the Company's proposal.

Q: WHAT IS THE PURPOSE OF ALLOWING THE COMPANY TO RECOVER NLR?

A: NLR are intended to "make the Company whole" with respect to fixed cost recovery when it sells fewer therms as a result of efficiency programs than were assumed in the previous RSA. This is based on the premise that it is not reasonable to cause the Company to under-collect its approved fixed costs as a result of implementing efficiency programs. Allowing NLR recovery is intended to remove this disincentive that might otherwise discourage utilities from offering EE programs. Importantly, related to the discussion of free riders above and as indicated in the term, the Company should only be eligible to recover *net* lost revenues, which represent the reductions in sales the Company's programs actually cause to occur. There is no circumstance in which the Company should collect lost revenues based on gross savings.

Q: HOW COULD THE RSA PROCEEDING BE USED TO ADDRESS NET LOST REVENUES?

A: I believe there are two approaches that could be used, either individually or in combination:

1. Include the amount of NLR from the previous year's EE programs as a component of the approved revenue requirement. In this approach the revenue requirement would first be determined based on expected sales *after* factoring in the effects of the *previous* year's EE programs, and then an amount representing net lost revenues from only the prior year would be added to the revenue requirement. This would

also reset the NLR going forward such that the NLR would no longer occur for past programs once this reset was done;

2. Alternatively, address NLR for the upcoming rate year by *anticipating* expected sales after factoring in the effects of the *coming* year's EE programs.

In either approach I believe it will be important to include a preceding year true-up with each RSA, to ensure the Company collects in total within the range of its allowed revenue requirement and that it does not over-collect its approved revenue requirement due to NLR.

Q: HAVE YOU PREVIOUSLY TESTIFIED ABOUT CONCERNS YOU HAVE WITH NLR RECOVERY IN OTHER JURISDICTIONS?

A: Yes. The concern I have expressed in other litigation is that when several years elapse between base rate cases, with no limits on the length of time for net lost revenue collection and no true-up process, it becomes increasingly likely that a utility earns more than its approved fixed costs. NLR recovery is only an interim solution to ensure the utility does not under-recover until the next litigated base rate case, when fixed cost recovery is typically established.

Q: IS THERE ANYTHING IN THE COMPANY'S FILING THAT SUGGESTS YOUR CONCERN OF OVER-RECOVERY MIGHT NEED TO BE ADDRESSED?

A: In response to discovery on NLR, the Company indicates that "DESC expects that if the programs are approved, as proposed, the net lost revenues will be recovered for the life of the Gas DSM programs. Net lost revenues result from therm savings experienced by customers due to implementation of Gas DSM programs and, therefore, will exist for the life of the programs."[18]

Q: IS DESC'S VIEW THAT NET LOST REVENUES WILL PERSIST FOR THE LIFE OF THE PROGRAMS CORRECT?

A: No, it is not correct. The gas savings resulting from the programs will exist for the life of the measure, which may be different than the life of the program, but the NLR will only exist until the approved revenue requirement is reset in the RSA proceeding. Once the sales forecast is updated to reflect program savings, NLR goes to zero. In contrast to the Company statement cited above, Company Witness Smith states that "[t]he annual RSA proceeding allows utilities to reset base rates annually, which eliminates the need for DESC to include an estimate for net lost revenue in its Gas DSM Rider as is done for the Company's Electric DSM rider."[19] I understand this statement as consistent with my position that once the sales forecast is adjusted to account for the EE programs there will not be ongoing NLR.

Q: HOW DO YOU RECOMMEND THE COMMISSION RESPOND TO THE COMPANY'S REQUEST TO ADDRESS NLR FROM THE GAS EE PROGRAMS IN THE ANNUAL RSA PROCEEDING?

A: I recommend the Commission approve this recommendation and establish clear parameters for how NLR should be addressed in the RSA in advance of the Company's next RSA filing to ensure transparency and address any over-collection risk that could inadvertently result from NLR recovery.

---

[18] DESC Response to CCL/SACE Data Request No. 1-4, attached as Exhibit JG-8.
[19] Direct Testimony of Jaton R. Smith, p. 10 of 12, lines 14-16.

RECOMMENDATIONS

Q: WHAT RECOMMENDATIONS DO YOU HAVE FOR THE COMMISSION?

A: I recommend that the Commission:

1. Approve DESC's proposal for the EnergyWise store;
2. Approve the NEEP proposal as filed, but;
   a. Direct the Company to conduct further analysis of opportunities to cost-effectively implement comprehensive measures in NEEP on a dual-fuel gas and electric basis;
   b. Direct the Company to file the results of this analysis with the Commission in 180 days.
3. Reject the Residential High Efficiency Gas Equipment Rebates and Commercial High Efficiency Gas Equipment Rebates programs without prejudice, and direct the Company to include the following as part of any future re-filed program proposal:
   a. The findings of market research to determine a baseline for current market share of any proposed high efficiency gas equipment;
   b. Estimated net-to-gross ratios for any proposed high efficiency gas equipment and updated cost-effectiveness results based on net savings;
   c. For any proposed high efficiency gas equipment for which there are high efficiency electric alternatives available in the market, provide the results of a life-cycle cost and carbon emissions analysis comparing the proposed gas equipment to high efficiency electric alternatives. For example, any application proposing rebates for high efficiency gas furnaces should

include a life cycle cost analysis comparing the costs of a gas furnace-electric central air conditioner system to a high efficiency electric heat pump.

4. Approve the Company's recommendation to address NLR in its RSA proceedings and establish clear parameters for how NLR should be addressed in advance of the Company's next RSA filing to ensure transparency and address any over-collection risk that could inadvertently result from NLR recovery.

Q: DOES THIS CONCLUDE YOUR TESTIMONY?

A: Yes.

CERTIFICATE OF SERVICE

I hereby certify that the parties listed below have been served via first class U.S. Mail or electronic mail with a copy of the *Direct Testimony of Jim Grevatt* on behalf of South Carolina Coastal Conservation League and the Southern Alliance for Clean Energy.

Carrie Grube Lybarker, Counsel S.C. Department of Consumer Affairs Post Office Box 5757 Columbia, South Carolina 29250 clybarker@scconsumer.gov	Christopher M. Huber, Counsel Office of Regulatory Staff 1401 Main Street, Suite 900 Columbia, South Carolina 29201 chuber@ors.sc.gov
Conner J. Parker, Asst. Consumer Advocate S.C. Department of Consumer Affairs Post Office Box 5757 Columbia, South Carolina 29250 cparker@scconsumer.gov	Emma C. Clancy, Counsel Southern Environmental Law Center 525 East Bay Street, Suite 200 Charleston, South Carolina 29403 eclancy@selcsc.org
Jason A. Richardson, Esquire McGuire Woods, LLP 1301 Gervais Street, Suite 1050 Columbia, South Carolina 29201 jrichardson@mcguirewoods.com	K. Chad Burgess, Dep. General Counsel Dominion Energy Southeast Services, Inc. 220 Operation Way – MC C222 Cayce, South Carolina 29033 Chad.burgess@dominionenergy.com
Matthew W. Gissendanner, Counsel Dominion Energy Southeast Services, Inc. 220 Operation Way – MC C222 Cayce, South Carolina 29033 Matthew.gissendanner@dominionenergy.com	Michael Anzelmo, Counsel McGuire Woods, LLP 1301 Gervais Street, Suite 1050 Columbia, South Carolina 29201 manselmo@mcguirewoods.com
Nicole M. Hair Office of Regulatory Staff 1401 Main Street, Suite 900 Columbia, South Carolina 29201 nhair@ors.sc.gov	Roger P. Hall, Counsel S.C. Department of Consumer Affairs Post Office Box 5757 Columbia, South Carolina 2925- rhall@scconsumer.gov

This 4th day of April, 2022.

s/Kate Lee Mixson